

### Weekly Influenza Summary:

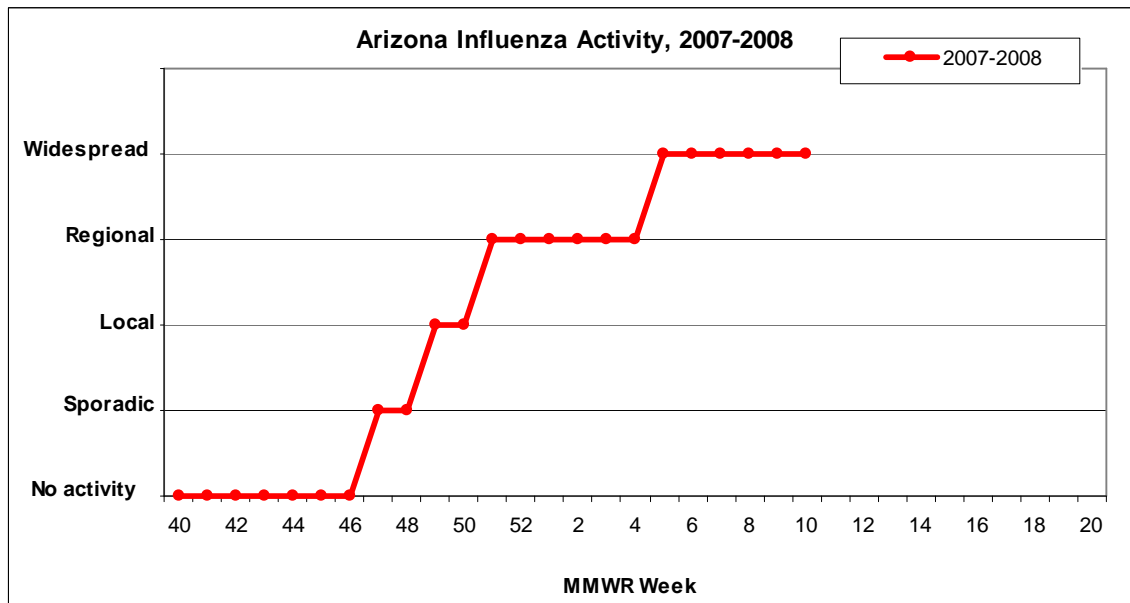
Arizona's influenza activity level remained at "widespread" for the week ending in 3/10/08 (week 10). This is the sixth straight week that Arizona reported "widespread" activity. During the 2007-2008 influenza season, 3,669 lab-confirmed cases have been reported from all fifteen counties in Arizona. No pediatric influenza-associated deaths have been reported in Arizona for the current season. The influenza-like-illness rate is above the state baseline for week 9.

Data in this report are provisional and may change as more reports are received.

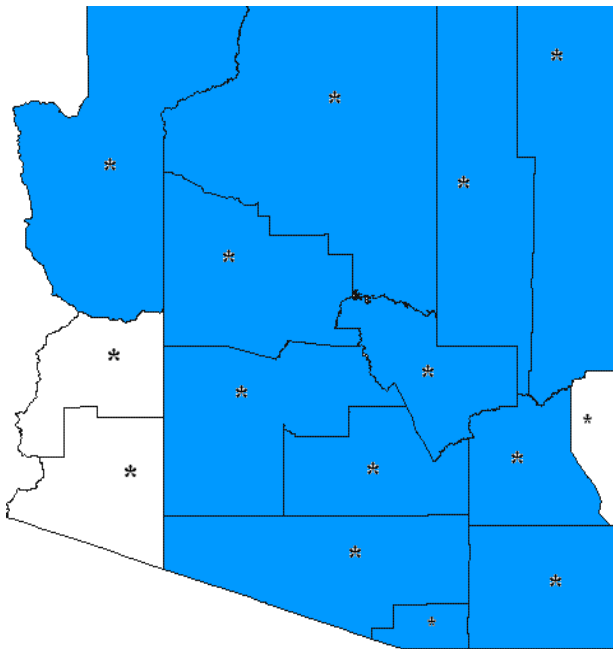
National influenza surveillance data are available at the CDC's Influenza Surveillance site (<http://www.cdc.gov/flu/weekly/fluactivity.htm>).

### Arizona Influenza Activity Levels

The graph below shows the influenza activity levels reported to the CDC for this season only. CDC has changed the reporting criteria for state activity levels so Arizona's data from previous seasons are no longer directly comparable to the current season. For week 10, Arizona reported "widespread activity". Definitions of these reporting categories can be found at <http://www.cdc.gov/flu/weekly/fluactivity.htm>.



## Influenza Activity by County



### **Key:**

\* = Any activity reported this season

Blue = Activity reported in past three weeks

White = No activity reported in past three weeks

## Flu Cases Reported 2007 – 2008 Season

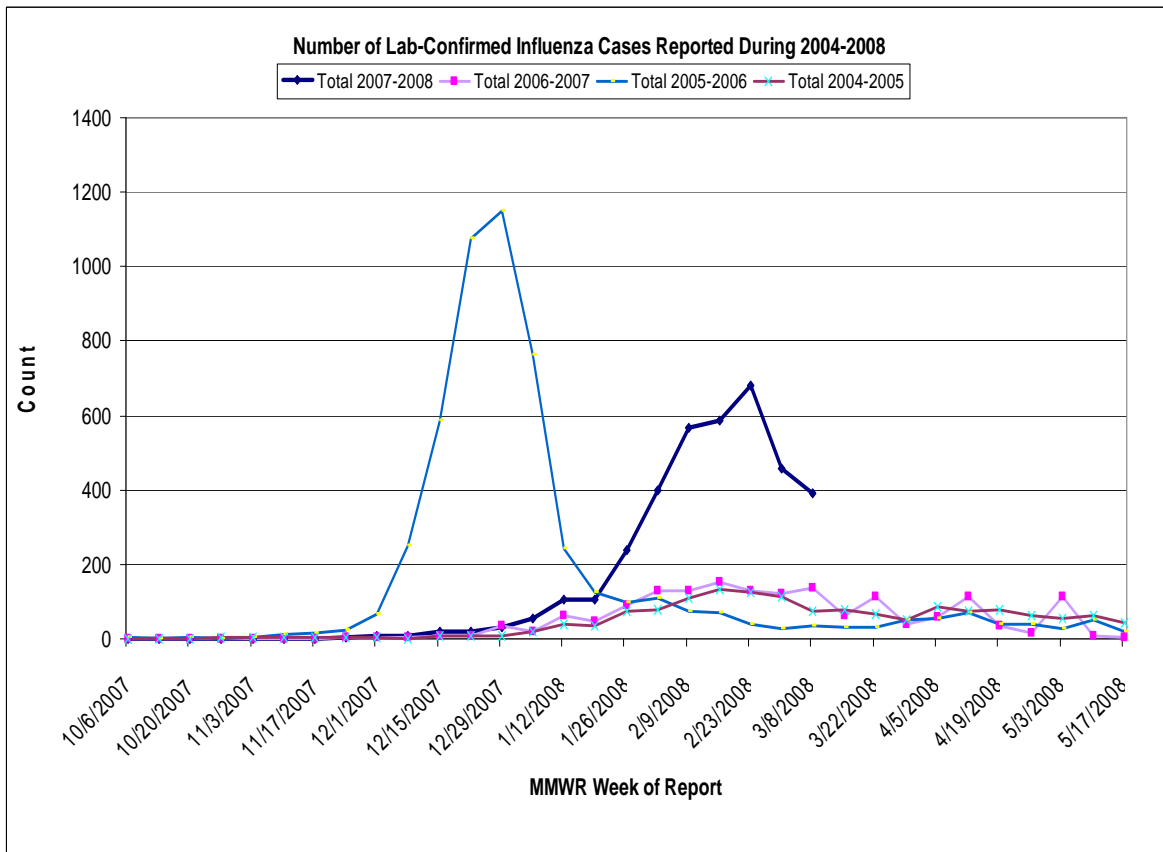
| County   | # cases | County   | # cases | County     | # cases |
|----------|---------|----------|---------|------------|---------|
| Apache   | 32      | Greenlee | 3       | Pima       | 757     |
| Cochise  | 14      | La Paz   | 1       | Pinal      | 41      |
| Coconino | 453     | Maricopa | 1704    | Santa Cruz | 14      |
| Gila     | 12      | Mohave   | 92      | Yavapai    | 35      |
| Graham   | 354     | Navajo   | 150     | Yuma       | 2       |
| Unkown   | 5       |          |         | Total      | 3669    |

## Flu Cases Reported Last Week

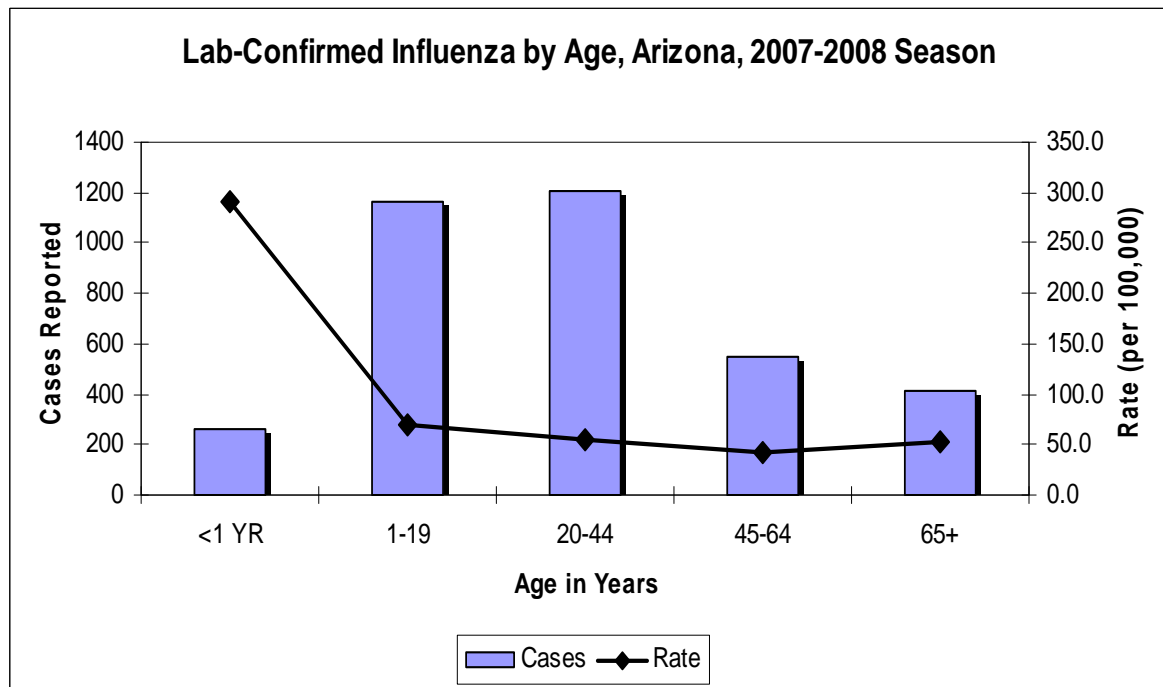
| County   | # cases | County   | # cases | County     | # cases |
|----------|---------|----------|---------|------------|---------|
| Apache   | 5       | Greenlee | 0       | Pima       | 69      |
| Cochise  | 1       | La Paz   | 0       | Pinal      | 3       |
| Coconino | 18      | Maricopa | 213     | Santa Cruz | 2       |
| Gila     | 0       | Mohave   | 8       | Yavapai    | 8       |
| Graham   | 52      | Navajo   | 12      | Yuma       | 0       |
| Unknown  | 0       |          |         | Total      | 391     |

## Lab Surveillance:

Laboratories report positive influenza tests to ADHS. Of the lab-confirmed influenza reported this season, 2,218 are influenza A (542 confirmed by culture or PCR), 1,152 are influenza B (283 confirmed by culture or PCR) and 299 are unknown.



Ages of reported cases range from less than one year to over 65 years.

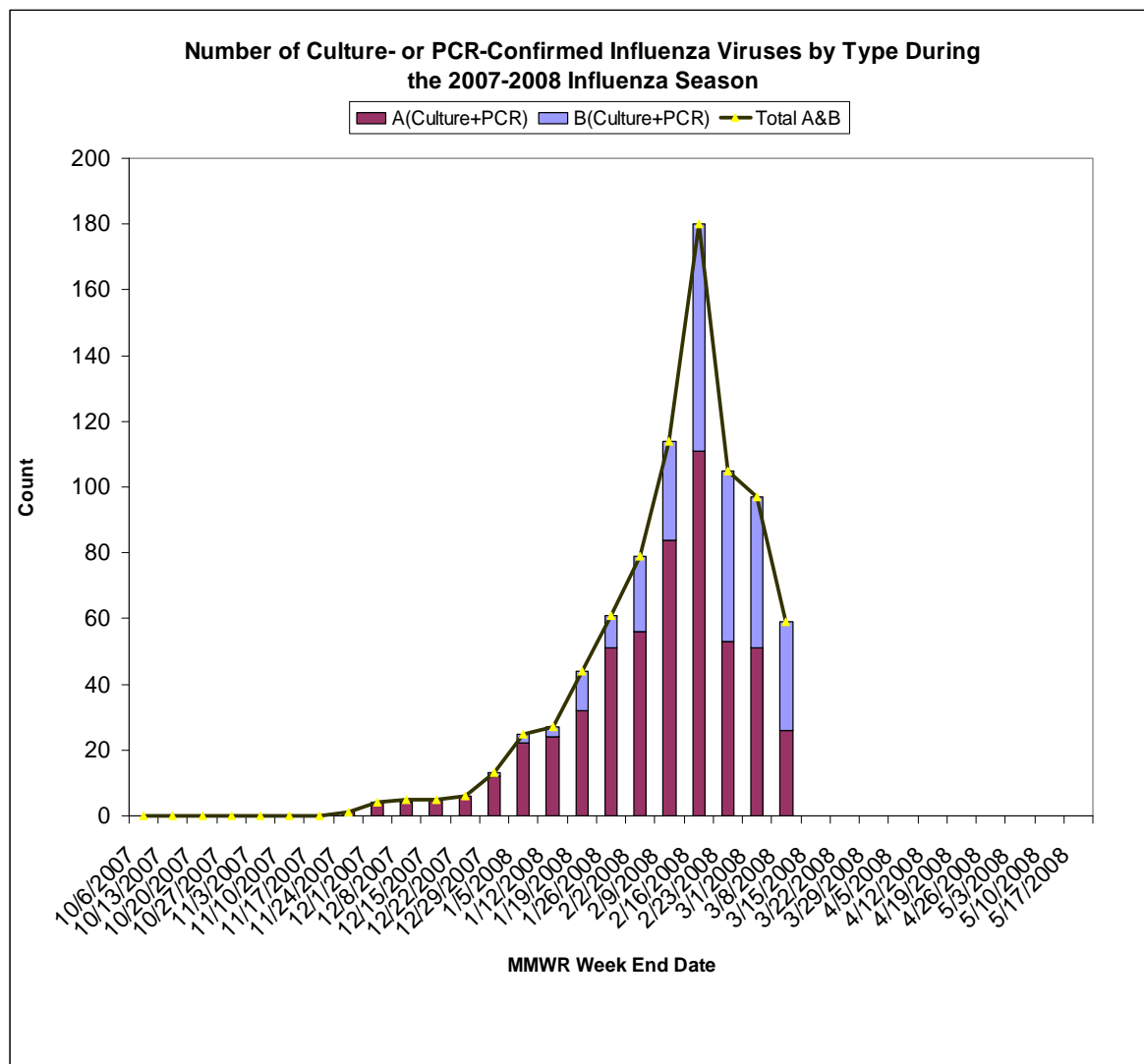


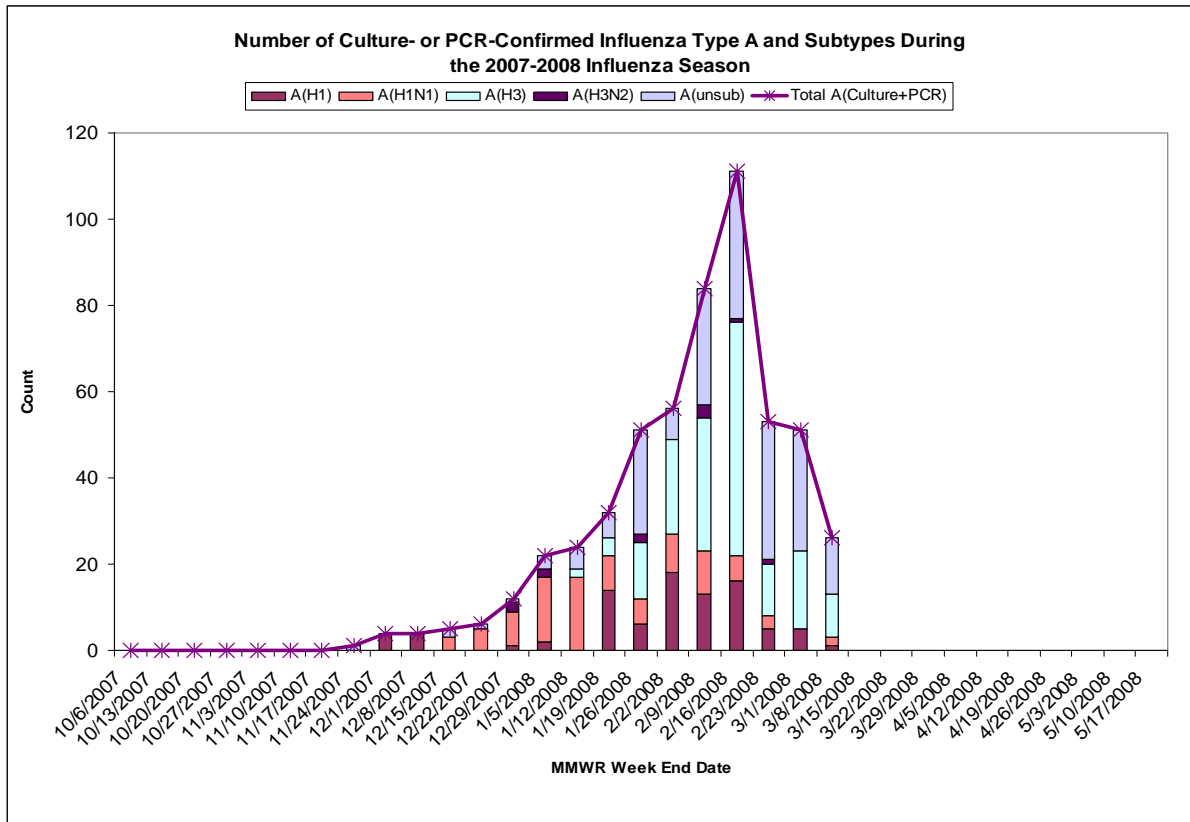
### Subtyping – Culture or PCR Results:

Viral isolation, or culture, is currently the “gold standard” for diagnosis of influenza virus infections. The influenza subtype can be determined by a test called hemagglutination inhibition (HI) using viral isolates. Polymerase chain reaction (PCR) can also be used to identify influenza B and the hemagglutinin (H) component of influenza A.

Of the 542 culture- or PCR-confirmed influenza A cases, 11 are H3N2 and 166 are H3 by PCR, 89 are H1 and 92 are H1N1 and the other 184 influenza A cases are untyped. Of the 283 culture- or PCR-confirmed influenza B cases, 95 are B/Shanghai and the remaining 188 PCR positive influenza B cases are untyped.

The following graphs explain further the culture- or PCR-confirmed influenza cases during the 2007-2008 influenza season.

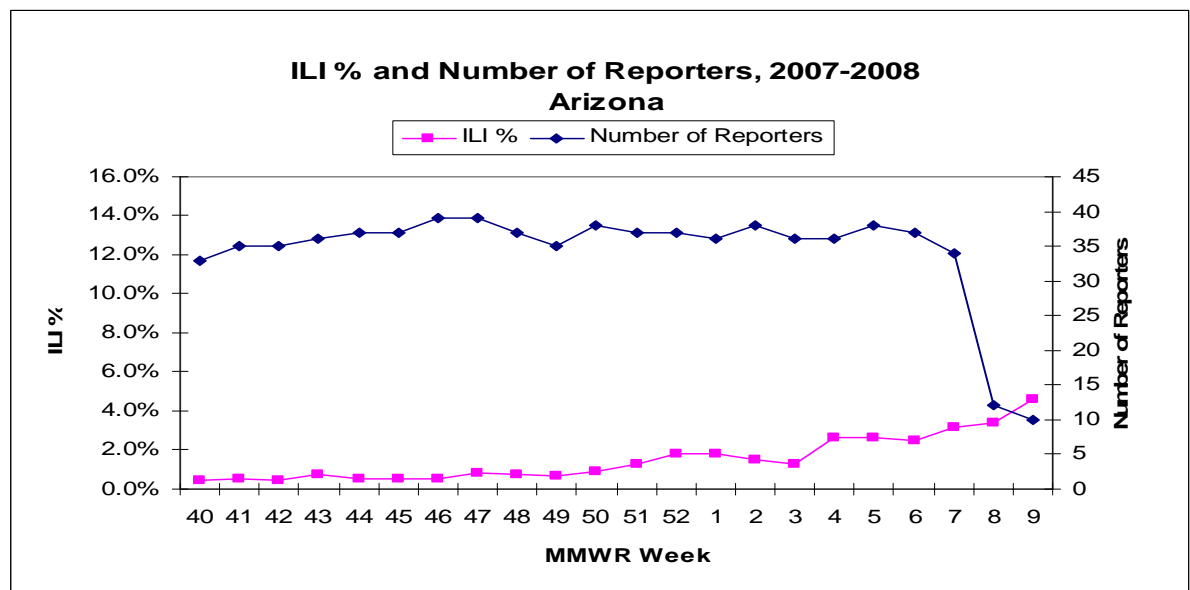




### Influenza-Like Illness (ILI) Surveillance from Sentinel Providers

The proportion of patient visits to sentinel providers for ILI in the state was 4.6% for the week ending 3/01/2008 (week 9). This proportion is much higher than the Arizona ILI baseline (0.5%). As of 3/10/08, 10 sentinel providers reported by the end of week 9.

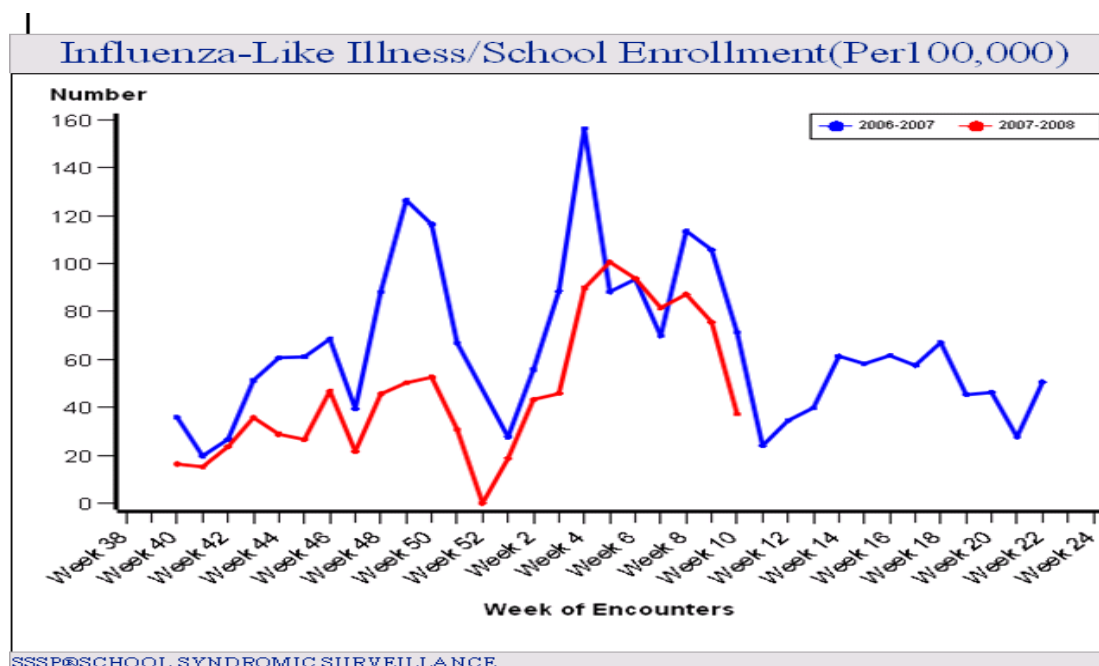
ILI is defined as a fever of at least 100°F plus either a cough or a sore throat.



### Influenza-Like Illness (ILI) Surveillance from Participating Arizona Schools

The Arizona Department of Health Services (ADHS) and Arizona School Nurse Consortium (AZSNC) developed and implemented a software program called Child Health Indicator Program (CHIP) to assist school nurses in electronic management of student health records. Currently, the nurses of 340 Arizona schools use the software to collect information on student health conditions for 266 nursing diagnosis codes, including influenza-like illness (ILI), rash, and gastrointestinal illness (GI).

The graph presents the weekly trend of ILI syndromes reported among students during the school year of 2006-2007 and 2007-2008. The number of school nurse encounters are not diagnosed cases of communicable diseases but are based on the nursing codes (acute, chronic etc.) that school nurses entered to track student conditions. Also, the numbers in the graph are only from schools that used CHIP during the school year.

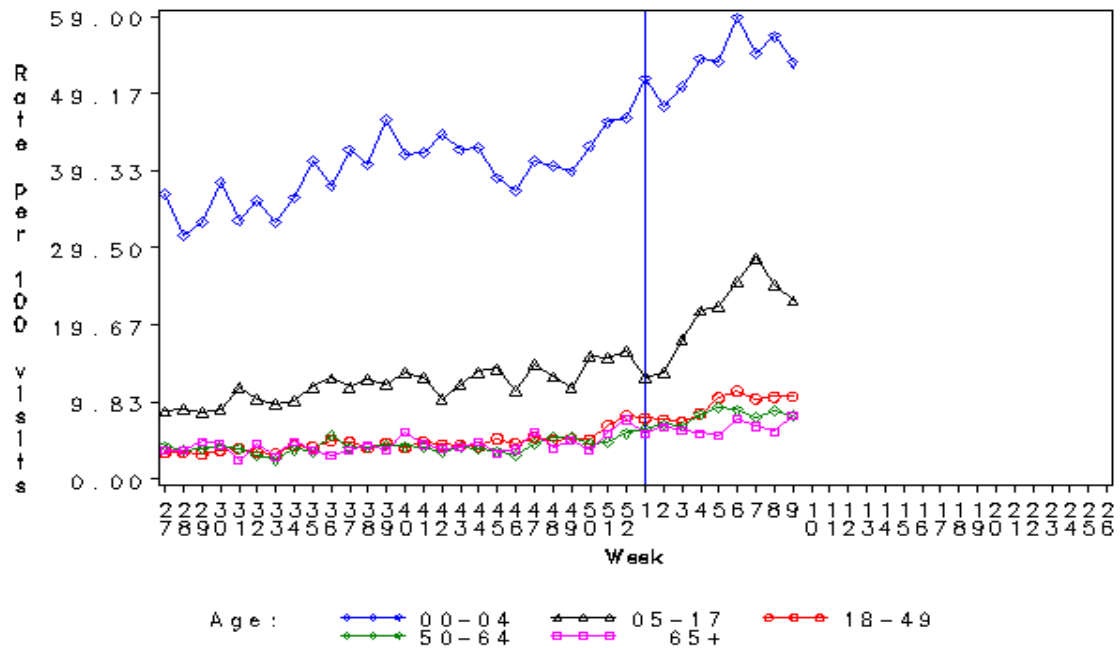


### Influenza-Like Illness (ILI) Surveillance from Biosense

BioSense is to a national, real-time biosurveillance system that can be used for early event detection and health situational awareness. Currently, eight hospitals in Arizona submit data including patient chief complaint, physician diagnosis, supporting patient demographic data, daily hospital census to the CDC BioSense on daily basis. Please find more information about BioSense at <http://www.cdc.gov/biosense/>

The graphs are time series analysis results based on BioSense hospitals emergency department chief complaint data in Arizona. The trend lines overlaid in the graph are the rate of Flu-Fever-Cough cases per 100 visits by age group.

**BioSense Hospitals Emergency Department Chief Complaint Data, Flu-Fever-Cough**  
**Arizona**  
**Season 2007-2008**



**RSV Activity in Arizona:**

As of 3/10/2008, 1,931 lab-confirmed cases have been reported. There were 113 new cases of RSV were reported during week 10.

